What is claimed is:

- 1. An engine control system comprising:
- a NOx catalyst containing ammonia as a reducing agent, provided in an exhaust system of an internal combustion engine, and selectively reducing NOx from exhaust gases;
- a reducing agent supply providing the reducing agent to the exhaust system and positioned upstream of the NOx catalyst;
- a NOx sensor detecting an amount of NOx in exhaust gases emitted by the internal combustion engine;
- a fuel injection system injecting fuel to the internal combustion engine in a main injection mode performing main injection or a pilot-and-main injection mode performing pilot injection and main injection, the pilot injection proceeding the main injection; and
- a control unit activating the fuel injection system in the pilot-and-main injection mode when a NOx purifying efficiency determined on the basis of data of emitted NOx is equal to or below a preset NOx purifying efficiency.
- 2. The engine control system according to claim 2, further including a catalyst temperature sensor detecting a temperature of the NOx catalyst, wherein the control unit activates the fuel injection system in the pilot-and-main injection mode when NOx purifying efficiency is equal to or below the preset purifying efficiency and when the temperature detected by the catalyst temperature sensor is below a catalyst activating temperature.